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26 August 1957

*file cy***BRIEFING PAPER FOR THE JOINT CHIEFS OF STAFF****Gentlemen,**

Our object in this presentation is to outline for you intelligence of critical value to major national intelligence objectives which we anticipate will result from the coverage of certain Soviet targets within the range of U-2 aircraft. Whereas we are vitally interested in acquiring precise target information for the application of our strategic weapons, this is not one of the critical objectives of this briefing.

We propose to attempt to define for you the unique role which AQUATONE-type photography plays in the production of National Intelligence estimates, which provide the basis for important decisions affecting the National security. All of the principal targets we will discuss fall into those strengths that have been determined by the National Intelligence Community to be the most significant in the Soviet ability to strike at the United States.

These are: The Soviet guided missile system, the Soviet long range bomber force, and Soviet nuclear energy production system.

Our present intelligence on all of these critical Soviet capabilities still contains major areas of ignorance. A significant quantity of our existing information on these strengths is fragmentary, and, consequently, our present estimates, in some cases, admit to significant margins of error.

US defense plans, and budgets to support them, involve vast sums of money and allocation of effort, and, admittedly, are at present based on information having these significant margins of error. Accordingly, such plans and budgets can be materially affected by reducing the margins of error. And we feel that in the AQUATONE system we have an important tool in reducing these errors.

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In the critical field of Soviet guided missiles development, we find some of our major intelligence gaps. Until ten days ago, we had no direct observation of any part of the Soviet ballistic missile effort.

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[REDACTED] We have had no information regarding launching pads, erection and handling equipment, guidance installation and equipment, test stands, fuel storage, and other associated launching devices. Data on these items are essential for any firm statement as to the size, type, and pay load of missiles, guidance systems, and types of engines used for propulsion. This admitted undramatic type of information is vital for the production of precise estimates of present and potential Soviet missile capabilities.

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Now, at TYURA TAM, we have photographed and can study in detail a relatively new range still under construction and thus far reliably

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[REDACTED] The overcast on the far oblique in this display obscures our ability to identify what is probably the actual launching area--with its associated equipment, and--conceivably--actual long-range missiles. There is, however, convincing information on the range support elements. We intend to go back if possible to clarify the launching site at TYURA TAM. It is our expectation that comparable coverage of KAPUSTIN YAR would be extraordinarily rewarding in establishing for the first time a set of basic data against which further intelligence coverage from all sources could lead us to improve significantly our estimates on the state of GM development in the Soviet Union. This photograph on TYURA TAM leads some experts to suspect that the Soviet is two years ahead of our current estimate of their progress.

There are other significant targets in the Soviet missiles system that also probably will enable us to increase the value of Soviet missile estimates as a basis for National policy and planning.

Recovery of the enigmatic installation at MOZHAYSK might enable us properly to determine its function--and a clear picture of the similar installation at VALDAI probably would facilitate this determination.

In the Soviet nuclear energy system we find equally significant gaps in hard fact information. Until \_\_\_\_\_ days ago, we had never obtained comprehensive information on a single component of the system. Now we

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production from nuclear sources. In the Soviet long-range bombardment force, our gaps in information do not loom as large as the gaps in our knowledge of its missile system and nuclear energy production. However, certain gaps do exist and are significant. Except for this photograph of the Moscow/Fili aircraft factory, the only known producer of BISON jet heavy bombers, we have never obtained comprehensive information on any component of the Soviet long range bomber production system. From other sources of information, we have, however, been able to locate principal components of this system and to estimate production. However, actual photography of the Soviet bomber factories at VORONEZH, KUYBYSHEV, KAZAN, and IRKUTSK would enable us to measure production capabilities, both actual and potential, with a degree of precision not now obtainable.

Our knowledge of the true stature of the Soviet heavy bomber force has been limited by not only lack of precise information on production facilities but equally by the lack of first hand comprehensive and exact observation of the home bases of this force. Photography of the BISON base at SARATOV/ENGELS and the BEAR turbo-prop heavy bomber bases at CHEPELEVKA and BELAYA TSERKOV in the KIEV area would enable us to ascertain far more precisely than now is possible the size and deployment of its heavy bomber force and thereby open the way to the production of capability estimates regarding this force that would be more valuable than those possible at present.

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Photography of these bases, together with other home bases of the medium bomber components of the Soviet long-range bomber force, would permit us to prepare more precise estimates of the nuclear delivery capability of this force than we now can.

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The point must not be overlooked that valuable intelligence by-products also can be anticipated as a result of the coverage of the primary systems we have discussed. Route photography can be expected to yield significant details of other Soviet air installations, transportation systems, industrial facilities, and other economic and military targets which could be of a significance only slightly less than the information we anticipate on primary objectives. One of the outstanding bonus effects that we know will be derived by future exercise of the

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This increase in knowledge can only result in a firmer basis for National plans and decisions that involve consideration of the Soviet capability to resist our own strategic operations.

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It would be remiss to contend that even completely satisfactory photography of all of the installations we have mentioned would completely

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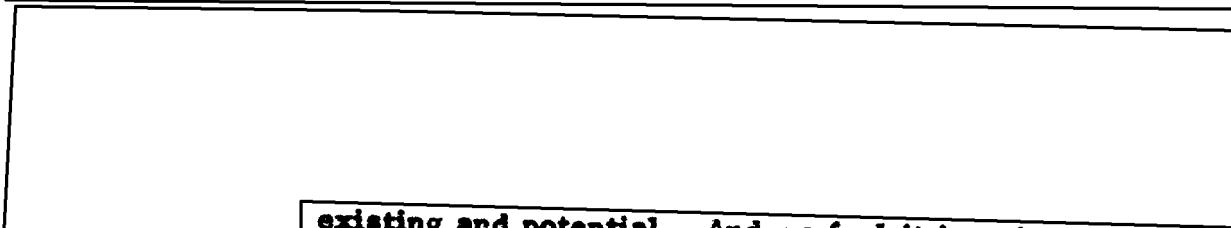
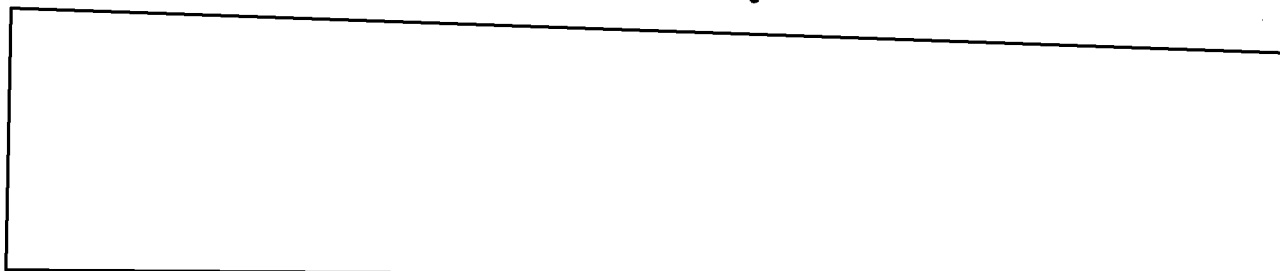
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eliminate all of our areas of uncertainty in existing estimates of these critical Soviet strengths. However, it can be said that satisfactory photography of these installations would provide new information of a quality and quantity not now obtainable from any other source on these primary targets. This information, properly exploited, would enable us, first, to establish the degree of validity of our existing estimates and, second, to refine, and probably expand, these estimates on the basis of a larger, more factual, and more complete body of information bearing on the specific strengths concerned.

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existing and potential. And we feel it is axiomatic that given these higher quality estimates national planners and policies to counter the pre-emptive and resistive strength of the Soviet Union can be formulated on a more positive, more efficient, more economical, and more timely basis than now is possible.

*John E. Bridge*  
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Lt. Col. AFCIN

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